NOTES AND MEMORANDA.

The Distribution of Unciola crenatipalma, Bate.—In my Notes on the Marine Invertebrate Fauna of Plymouth for 1892, in the last number of this Journal, I stated (p. 337) that although this interesting Amphipod is plentiful at Plymouth, its distribution seems to be very restricted, and that it is absent, among other catalogues, from my friend Mr. A. O. Walker's lists of the L. M. B. C. Amphipoda. Mr. Walker has, however, kindly called my attention to the fact that he has recorded the capture of several specimens of *Unciola irrorata*, Say, on the coast of Anglesey (Proc. Liv. Biol. Soc., iv, 1890, p. 243), and that he had little doubt that this name should really be U. crenatipalma, Bate. Upon comparison with some specimens of U. crenatipalma from Plymouth, Mr. Walker has been able to confirm the identity of the forms from the two localities, so that his record of U. irrorata in reality extends considerably the northern range of U. crenatipalma. The true U. irrorata of Say, he tells me, may be at once distinguished from U. crenatipalma, Bate, by the lower angles of the last two pleon segments, which in the former are produced into curved points, a distinction mentioned neither by Stebbing (Chall, Amphipoda) nor Bonnier (Bull, Sci. France, &c., 1889, t. xx, pp. 373-398). The known distribution of U. crenatipalma, from north to south, is now, therefore, as follows: - England: Anglesey (A. O. Walker); Weymouth (Gosse); Plymouth (Garstang). France: Dunkirk (de Guerne and Chevreux); Boulonnais (Bétencourt and Bonnier); Luc-sur-Mer, Belle-Ile and Croisic (Chevreux); Gulf of Gascony and north coast of Spain (Chevreux). - W. Garstang.

Raniceps raninus, Linn.—On the 23rd June, 1892, I received a specimen, $3\frac{1}{16}$ inches in length, which had been taken in a shove-net on the shore opposite New Clee Railway Station. No other examples were forthcoming until October, when, on the 25th and 26th, we took three on the Trinity, and four on the Middle Sand prawning ground in the shrimp-trawl. Of these, one measured $4\frac{1}{5}$ inches, and the others were about the same size. Two of them were placed in the Cleethorpes Aquarium, where they lived for some days, choosing, in the daytime, the darkest corner of the tank. One died, apparently from the effects of chafing; and the other, which seemed healthy,

contrived to get down the escape-pipe, and was killed. The resemblance borne by these lesser forkbeards to the dark variety of *Liparis Montagui*, which is the most common on the grounds where they were caught, is very striking when the fish are viewed from above. Even the dermal papillæ of Montagu's sucker are represented, though much less closely set, on the head of the gadvid.

Examples have been recorded from most of the British coasts, and the species has been taken in estuarine waters before, but I do not know that there is a distinct record of its occurrence at the extreme margin, as in the case of our first specimen. I imagine it must occur pretty regularly in the Humber, though I have found no one here who recollects to have met with it before. The resemblance to Montagu's sucker would probably account for its being overlooked by shrimp-trawlers.—E. W. L. H.

Chimæra monstrosa, Linn.—A male and a female of this species were taken in the second week of May by a Grimsby smack trawling from 70 into 135 fathoms, at the edge of the deep water to the north of the Great Fisher Bank, 320 miles from the Spurn. The abdominal viscera had been removed before they came under my observation. The male measures 27½ inches in total length, the caudal filament being nearly perfect, whilst the pre-anal region measures 9½ inches. All the accessory sexual organs are well developed; it is the smallest mature male that I have seen. The female was about the same size.—E. W. L. H.

Lumpenus lampetræformis, Walbaum.—I have received a specimen taken, in company with another, by Mr. F. Klotz, s.s. "Dominican," at 23 to 25 fathoms, 240 miles E. ½ N. of the Spurn Light-vessel during the last week of July, 1892. The species was first added to the British list by the occurrence of an example on the east coast of Scotland (vide Day, Rep. S. F. B., 1884, p. 78), and has since been recorded by Dr. Günther from the west coast (P. R. S. E., vol. xv, 1888, p. 211). The locality from which mine was derived lies outside the British area, but I was under the impression that it was rather further south than any that had been recorded. Dr. Günther, however, informs me that he has seen a specimen said to have been taken on the coast of Norfolk.—E. W. L. H.

Gastrosteus pungitius, Linn.—The ten-spined stickleback is common in some brick-field ponds at Beaconthorpe, though not so numerous as the three-spined species. Both kinds have been used at the Cleethorpes Aquarium for some time for feeding anemones, especially *Urticina felina*, and I had never noticed that one species

seemed less tolerant of sea-water than the other. I was therefore rather astonished to find an assertion, attributed, I suppose correctly, by Day to Couch, that G. pungitius "will not exist when confined in salt water, however diluted such may be." To test the truth of this, five examples were transferred from fresh to salt water. Three of them showed very little apparent irritation, but the two others gasped a good deal for some time, but finally, as far as the salinity of the water was concerned, the discomfort appeared to cease. These examples have failed, however, to adjust their air-bladders to the greater density of the salt water, and remained, in consequence, at the surface when at rest, though able to descend when inclined to do so. One has died, at the end of a week. Two appear perfectly contented with their new surroundings, and in no way inconvenienced by the density of the water, which is about 1.020°.—E. W. L. H.

Pleuronectes microcephalus, Donov.—I have alluded elsewhere to the occurrence of young lemon soles in the Humber in autumn. I have since received three, measuring 2\frac{3}{4}, 4, and 5 inches respectively, which were taken on the Tetney ground on the 7th of April. It seems, therefore, probable that some of these fish remain in the river throughout the winter. Whilst reserving a more detailed description, it may be remarked that these small examples exhibit all the markings shown by the adult when taken on a bright-coloured ground. In both cases the markings disappear very rapidly after death, but the dark pigment can be fixed by alcohol.—E. W. L. H.

Scorpæna dactyloptera, De la Roche.—A specimen, $4\frac{3}{4}$ inches in total length, was taken in a shrimp-trawl on the Tetney ground on the night of the 17th April. It has the colours of the adult, but the lower rays of the pectoral fins are still connected by membrane, as in other young examples that have come under my notice.

The species is known to occur all along the European and North Atlantic slope, at depths between 54 and 527 fathoms, but there is no record of its occurrence on the English coast. As the Tetney ground is nowhere deeper than five fathoms, I would call attention to the extension of the vertical rather than to that of the horizontal range. From the accounts of prawn fishermen I believe that several other small examples have been taken in the Humber this spring. E. W. L. H.